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# Omron HEAT Pain Pro PM311 Instruction Manual

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## **Omron HEAT Pain Pro PM311 Instruction Manual**



## INTRODUCTION

Thank you for purchasing the Omron® HEAT Pain Pro™ Model PM311.

In order to use the unit safely, read the complete manual carefully before using the unit for the first time.

Keep this instruction manual in a convenient place or store with the unit for future reference.

- **Register your product on-line at [www.register-omron.com](http://www.register-omron.com).**
- **Keep your purchase receipt as proof of purchase for warranty coverage.**

This box contains the following components:

- Main Unit
- AC Adapter
- 2 Pair of Gels
- Cord with Pads
- Pad Holder
- Instruction Manual
- Quick Start Guide with Pad Placement Guide

### Intended Use

**The Omron Heat Pain Pro™ is intended for:**

**The relief of pain associated with sore or aching, muscles of the lower back, arms, legs, shoulder, or foot due to strain from exercise or normal household work activities.**

**Environments of Use: Clinics, hospital and home environments Patient Population: Adult**

## INSPECTION

**Before using your unit, inspect to ensure that**

1. **The cord is not broken.**
2. **The gel is not damaged.**
3. **The cord with pads connection is not broken.**
4. **The unit is intact and working.**

**If there is any damage, consult Omron Healthcare Customer Service at 1-800-634-4350.**

**SAVE THESE INSTRUCTIONS**

## IMPORTANT SAFETY INFORMATION

### CONTRAINDICATIONS

Do not use this device if you have a cardiac pacemaker, implanted defibrillator, or other implanted

metallic or electronic device. Such use could cause electric shock, burns, electrical interference, or death.

## **SAFETY SYMBOLS USED IN THIS INSTRUCTION MANUAL**

**DANGER!** Improper use may cause danger resulting in death or serious injury. These are situations in which the device should not be used.

**WARNING!** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

**CAUTION!** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury to the user or patient or damage to the equipment or other property.

## **DANGER**

### **Dispose of the battery according to applicable local government regulations**

- This rechargeable battery has been specifically designed for this product. Do not use it in any other devices.
- Do not recharge this rechargeable battery once it has been removed from the main unit.
- Do not dispose of battery in a fire.
- Do not crush or puncture the battery because it may cause spontaneous flames.
- Do not disassemble or modify it.
- Do not connect the + and - poles using a piece of metal or other conductive objects.
- Do not carry it or store it together with item such as necklaces and hair pins.
- Do not recharge, use, or leave the battery in any high temperature environment such as in a location near a fire or in direct sunlight. Doing so may cause the battery to overheat, ignite or rupture.
- Do not leave a battery that has been removed within reach of children or pets. Doing so may result in an injury or an accident. If liquid comes in contact with the battery, a fire or an accident may occur.

## **WARNINGS**

- Consult with your physician before using this device, because the device may cause lethal rhythm disturbances to the heart in susceptible individuals.
- If you have had medical or physical treatment for your pain, consult with your physician before using this device.
- If you are in the care of a physician, consult with your physician before using this device.
- If your pain does not improve, becomes more than mild, or continues for more than five days, stop using the device and consult with your physician.
- Do not place this device across your chest because the introduction of electrical current into the chest may cause rhythm disturbances to your heart, which could be lethal.
- Do not place this device over open wounds or rashes, or over swollen, red, infected, or inflamed areas or skin eruptions (e.g., phlebitis, thrombophlebitis, varicose veins).

## **IMPORTANT SAFETY INFORMATION**

- Do not place the pads over your neck because this cause severe muscle spasms resulting in closure of your airway, difficulty in breathing, or adverse effects on heart rhythm or blood pressure.
- Do not place this device on the head, the mouth, or any area of the face.
- Do not place this device near the heart, or on genital area.
- Do not place this device on both sides of the chest cavity simultaneously (lateral or front and back).
- Do not place this device on both legs, such as calves at the same time because cardiac disturbance may occur.
- Do not place this device on the bottom of both feet at the same time because cardiac disturbance

may occur.

- Do not use this device over, or in proximity to, cancerous lesions.
  - Do not use this device when in the bath or shower.
  - Do not use this device while sleeping.
  - Do not use this device on patients with paresthesia (abnormal sensation) or peripheral neuropathy (damage to your peripheral nerves that causes weakness, numbness, and pain).
  - Do not use this device while driving, operating machinery, or during any activity in which electrical stimulation can put you at risk of injury.
  - Do not use this device during exercise or while sweating.
  - Do not use this device together with a life-supporting medical electronic device such as an artificial heart or lung or respirator.
  - Do not use this device on infants, toddlers, or children because this device has not been evaluated for pediatric use.
  - Do not use this device on pregnant women.
  - Do not use this device on persons in capable of expressing their thoughts or intentions.
  - Do not use this device on persons who are unable to operate the unit by themselves.
  - Do not use this device on or near any other heating device, heating element such as a dryer or oven.
  - Do not use this device while using another TENS device.
  - Do not apply stimulation in the presence of electronic monitoring equipment (e.g., cardiac monitors, ECG alarms), which may not operate properly when the electrical stimulation device is in use.
  - Do not use this device with a heating pad.
  - Do not use this device under blanket.
  - Do not use heat on any muscle or joint which has swelling or edema. It may worsen the pain or condition.
  - Do not use over sensitive skin areas or in the presence of poor circulation.
  - If used on the elderly, use caution due to more sensitivity of the skin.
  - Do not bend or fold the pad with gels at any time.
  - The Pad can ONLY BE USED with the Gel.
  - The pad with gel should not come in contact with any liquid or water during therapy.
  - Apply pads only to normal, intact, clean, healthy skin (of adult patients).
  - This product has a built-in rechargeable battery. To prevent the risk of overheating, fire or explosion, do not throw into fire, apply heat, puncture or crush, use or leave in a high temperature environment.
  - For Hospitals and Clinics, simultaneous connection of a patient to a high frequency surgical medical equipment may result in burns at the site of the stimulator electrodes and possible damage to the stimulator.
  - If you suffer from any serious illness, consult your physician in order to confirm that it is advisable for you to use this Power Relief unit.
  - Use carefully. May cause serious burns.
  - The unattended use of this HV-PAD with PMGEL by infants, toddlers, children or incapacitated persons may be dangerous.
  - If the product feels too hot, stop use immediately.
- **For Hospitals and Clinics, operation in close proximity (e.g. 1 m) to a shortwave or microwave therapy ME equipment may produce instability to the stimulator output.**

## PRECAUTIONS

- TENS is not effective for pain of central origin, including headache.
- TENS is not a substitute for pain medications and other pain management therapies.
- TENS devices have no curative value.
- TENS is a symptomatic treatment and, as such, suppresses the sensation of pain that would otherwise serve as a protective mechanism.
- Effectiveness is highly dependent upon patient selection by a practitioner qualified in the management of pain patients.
- The long-term effects of electrical stimulation are unknown.
- Since the effects of stimulation of the brain are unknown, stimulation should not be applied

across your head and electrodes should not be placed on opposite sides of your head.

- The safety of electrical stimulation during pregnancy has not been established.
- You may experience skin irritation, redness or burning or hypersensitivity due to electrical stimulation, the gel or the heat.
- If you experience any skin irritation or redness after a session, do not continue stimulation in that area of the skin.
- If you have suspected or diagnosed heart disease, you should follow precautions recommended by your physician.
- If you have suspected or diagnosed epilepsy, you should follow precautions recommended by your physician.
- Use caution if you have a tendency to bleed internally, such as following an injury or fracture.
- Consult with your physician prior to using the device after a recent surgical procedure because stimulation may disrupt the healing process.
- Use caution if stimulation is applied over the menstruating or uterus.
- Use caution if stimulation is applied over areas of skin that lack normal sensation.
- Keep this device out of the reach of infants, toddlers, and children.
- Use this device only with the cord with pads and accessories recommended by the manufacturer.
- **Place pads at least 1 inch apart for optimal result.**
- Do not use on wet skin (from sweating, bathing, high humidity).
- Do not use this device for any other purpose except for what it is intended for.
- Do not use this device without proper lighting. You may not be able to operate the unit successfully.
- **Do not use any another AC adapter other than the one provided in the Heat Pain Pro™ packaging.**
- Do not share pads with another person. This may cause a skin irritation or infection. Pads are intended for use by one person.
- Do not plug the cord into any device other than the Omron PM311.
- Do not move the pads to another location while the unit is on.
- Do not overlap pads or put pads on top of each other. It may weaken or stop therapy, or the unit may stop working. Gel pads may also stick together and cause gel to be removed when separating.
- Do not leave pads attached to the skin after treatment.
- Do not apply ointment or any solvent to the pads or to your skin because it will disrupt the pads from functioning properly. The self-adhesive pads will adhere to your skin.
- Do not place this device in a room with high humidity, such as a bathroom. This will damage the unit. Ideal temperature for using +50 to +104 °F (+10 to +40 °C), 30 to 80 % relative humidity.
- Do not insert the cord plug into any place other than the jack on the unit.
- Do not pull on the cord during treatment.
- Do not bend or pull the end of the cord.
- No modification of the unit is allowed.
- Therapy won't work with just 1 pad. You **MUST USE 2 PADS** at the same time.
- Make sure the components are connected well and the pads are fixed on the part of the body you wish to treat or the therapy may not be effective.
- Pads should not touch any metal object, such as a belt buckle, necklace or other metal worn under clothing.
- To avoid damage to the adhesive surface of the pads, only put the pads on the skin or the plastic pad holder.
- Always place clean pads in accordance with illustrations provided (Refer to pages 21 – 25, Pad Placement).
- If the unit is not functioning properly or you feel discomfort, immediately stop using the unit.
- When pulling out the cord from the unit, hold the plug and pull.
- Replace the cord when broken or damaged.
- The size, shape and type of pads may affect the safety and effectiveness of electrical stimulation.
- The electrical performance characteristics of pads may affect the safety and effectiveness of electrical stimulation.
- Using pads that are too small or incorrectly applied could result in discomfort or skin burns.
- **The PADS do not work correctly without the GELS. For safety and effectiveness, they must be used together.**
- Before use, inspect the Cord with PADS and the cord for open wires or any damage. If damaged,

do not use and replace immediately damaged cords and pads may cause skin burns or a fire.

- **Clean and dry affected area so it is free of all lotions/oils/sweat. The cord with pad and gel should be applied only to normal, intact, clean and healthy skin.**

#### **Adverse Reactions**

- You may experience skin irritation and burns beneath the stimulation electrodes applied to your skin.
- You may experience headache and other painful sensations during or following the application of electrical stimulation near your eyes and to your head and face.
- You should stop using the device and should consult with your physician if you experience adverse reactions from the device.
- **Do not use to treat one (1) region for extended periods of time (more than one 30 minutes a session, up to 3 times/day) or muscles in that region may become exhausted and sore.**

## **HOW HEAT PAIN Pro™ WORKS**

#### **What is it?**

**The OMRON® HEAT Pain Pro™ is a portable unit that provides 2-in-1 relief, pain relief of TENS and comfort of HEAT.** It is designed to reduce and relieve muscle and joint pain, stiffness and numbness in the back, arms, legs, shoulder and foot. The Heat Pain Pro™ uses the PAD with GEL for the delivery of TENS therapy to the surface of the skin for pain relief.

Any of the modes can safely be used on body parts or pains described in this manual or Quick Start Guide/Pad Placement Guide. The Heat Pain Pro™ can be successfully used in conjunction with any other pain treatment or medication.

This type of therapy, called Transcutaneous Electrical Nerve Stimulation (TENS), has been used for over 30 years by medical professionals such as physical therapists and chiropractors.

#### **How does TENS and HEAT work?**

Physical therapists have been using the combination of heat and TENS for decades. The HEAT warms the muscle for soothing comfort, and TENS provides pain relief.

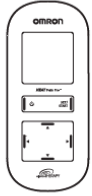
TENS therapy suggests that electrical stimulation therapy may work in several ways:

1. The gentle electrical pulses move through the skin to nearby nerves to block or shut out the pain message from ever reaching the brain from the source of the pain.
2. The gentle electrical pulses increase the production of the body's natural pain killer, such as endorphins.
3. Furthermore, it is thought that the electrical stimulation improves blood circulation as well. Muscles contract and relax with the flow of the electrical stimulation. With repeated contracting and relaxing, the blood flows in and out and the blood circulation is improved.

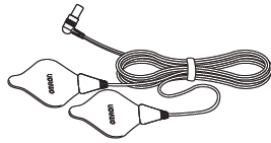
## **KNOW YOUR UNIT**

#### **PACKAGE CONTENTS**

Main Unit



Cord with Pads



Pad Holder



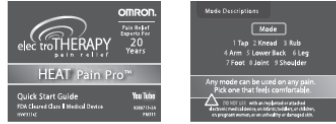
Gels (2 pair)



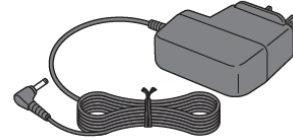
Instruction Manual



Quick Start Guide/  
Pad Placement Guide




AC Adapter (HHP-AM11)  
(unplug the AC adapter when using the unit)

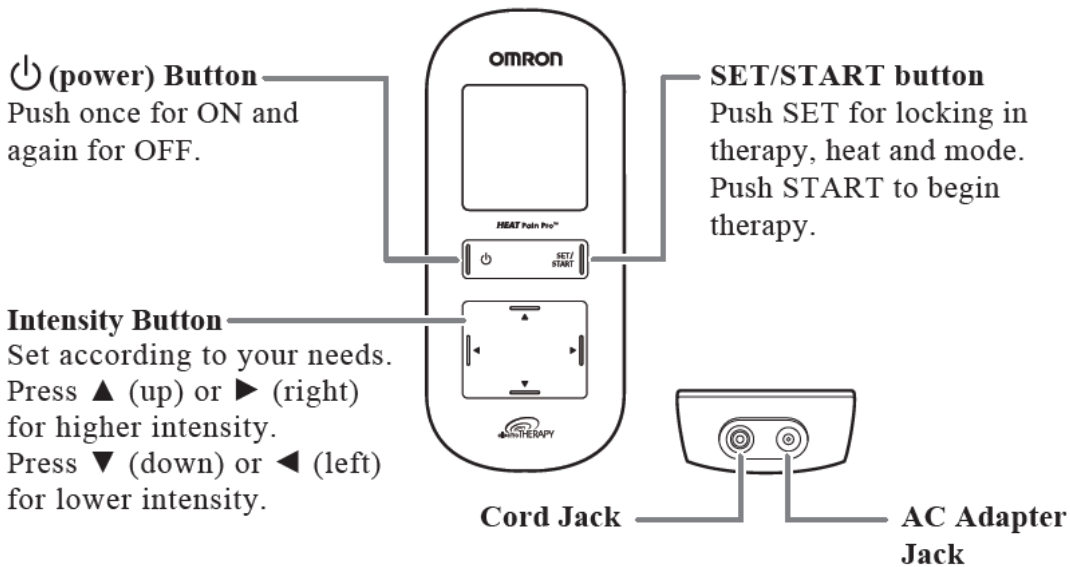


## KNOW YOUR UNIT

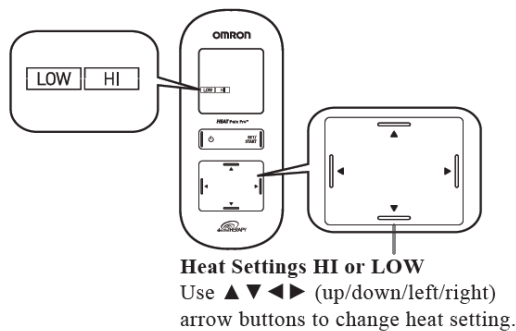
### FEATURES

1. **2 Heating modes**, low or high, warms up the muscle.
2. **3 therapy choices** (COMBO 1, COMBO 2, TENS)
3. **9 pre-set modes** work with each therapy choice.
4. **20 intensity levels** (1 low to 20 high).
5. **Pair of Gels** (durable, re-usable, up to 30 uses).  
(Only use OMRON® manufactured pads with gels with the unit).
6. Automatic **30 minute shut off**.
7. **Big screen** lets you clearly control your therapy with mode, intensity level and minutes left.
8. **Low battery icon** (  ) displays to remind you to charge the unit.
9. **PAD** displays if the pad falls off.

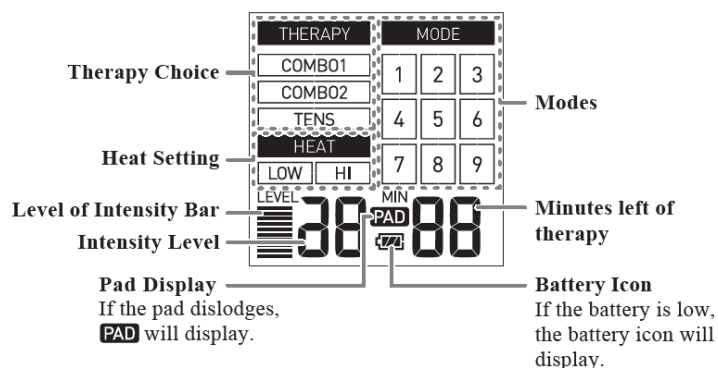
### BUTTONS AND THEIR FUNCTIONS







**Note:** Low temperature - 107 °F (42 °C)  
 Hi temperature - 110 °F (43 °C)  
 Actual temperature may vary due to skin condition, age,  
 location of pain and more.



## INSPECT UNIT AND RECHARGE BATTERY

**Before using your unit, inspect these things.**

1. **The cord is not broken.**
2. **The gel is not damaged.**
3. **The cord with pads connection is not broken.**
4. **The unit is intact and working.**

**Before first time use:**

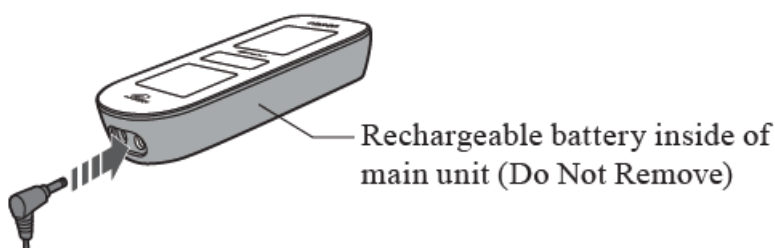
We recommend charging the battery to a full 100 % charge.

**After first time use:**

Once fully charged, **the battery will last for (4) 30 minutes uses on average. It takes about 5 hours to charge once battery is empty.**

**Note:** If not using the unit for 3 months, recharge it. Battery may not charge at all under extreme environmental conditions, extreme high heat or cold temperatures.

### STEP 1 - CONNECT THE AC ADAPTER TO THE JACK ON THE UNIT

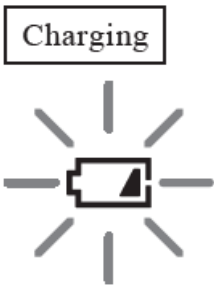




### STEP 2 - INSERT THE POWER PLUG INTO AN OUTLET



**Note:** Do not use another AC adapter other than the one provided.





- When charging the battery, the battery icon blinks on the screen.



- When fully charged, the icon will display shortly on the screen, then power off. Press the  (power) button to see if the battery is fully charged.
- Press the  (power) button when the display is off. Then the battery icon appears on the display.

### BATTERY ICON

**Note:** While the battery is charging, the main unit does not work.

Display	Contents
	Battery charge is full.
	Battery charge is half.
	Battery is close to low.
	Battery is depleted.

### Battery life

Rechargeable battery will last for 500 uses when fully charged and under the following conditions: new battery was fully charged, used 1 time/day in normal temperatures of 73.4 °F (23 °C). Battery life depends on usage and storage conditions.

**Note:** Temperature during battery charging should be cool and dry, +41 to +95 °F (5 to +35 °C).

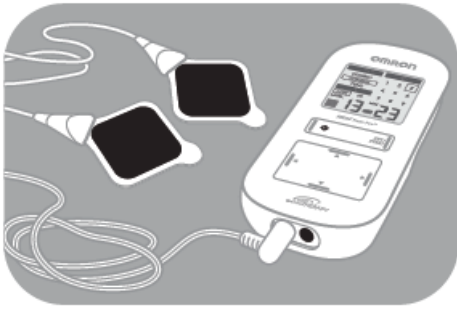
### STEP 3 - UNPLUG THE AC ADAPTER AND POWER PLUG ONCE THE BATTERY IS FULLY CHARGED



## ASSEMBLY STEPS

### STEP 1 - PREPARE PADS

Put the jack into the bottom left side of the main unit. Place the pads (dark side up) onto a flat surface.



**Note:** Do not turn the power on before placing the pads on the body.

**Before use, inspect the Pad and the cord for open wires or any damage, if damaged, do not use and replace immediately because it could cause skin burns or fire.**

### STEP 2 - ASSEMBLE GELS

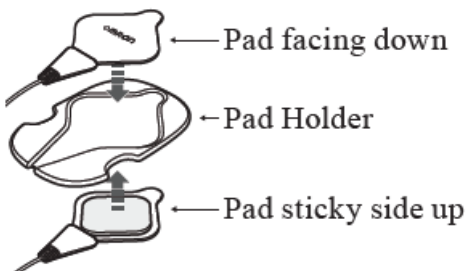
Remove the Gels from the sealed plastic container.

**Note:** The Pad and the Gel must be used together for safety and effectiveness.  
Clean and dry affected area so it's free of all lotions/oils/sweat.



### STORING THE PADS ON THE PAD HOLDER

Remove the plastic film and place the sticky side of the gel on either side of the pad holder.



### STEP 3 - PLACE GELS ONTO THE PADS

**Each gel has 2 plastic films. Remove the blank plastic film and place it squarely onto the dark side of the pads.**

Make sure the gel lays evenly and securely with no bubbles, bending or missing pieces. Check for damage and check the adhesion before each therapy session.

**The gel should read "SKIN" on top.** Remove the "SKIN" side's plastic film and place onto the skin.



**Note:** Do NOT turn unit on until pads with gels are on your skin. You MUST USE BOTH PADS with GELS or stimulation will not work.







**STEP 4 - ATTACH THE PADS TO THE BODY**

Make sure that pads stick to the skin.

**For optimal therapy:**

- **Place pads on either side of the pain**, not directly on the pain.
- Place pads at least 1 inch **apart**.
- **MUST USE TWO PADS** at a time for therapy to work.
- **Do not overlap pads** or put on top of each other.
- **Do not add spray, lotions or creams** to skin or pads.
- **Do not share pads.**
- **The pads and gel are not made with natural rubber latex.**

**NEVER APPLY THE PADS TO THESE BODY AREAS:**

	<p>The <b>head</b>, the mouth, or any area of the face.</p>		<p>Both sides of the <b>chest cavity</b> simultaneously (lateral or front and back), or <b>across your chest</b> because the introduction of electrical current may cause rhythm disturbances which could be lethal.</p>	<p><b>Open wounds</b> or rashes or over swollen, red, infected or inflamed areas or skin eruptions (such as varicose veins, phlebitis, thrombophlebitis and thrombosis), or on top of or close to cancerous lesions, or over areas of skin that lack normal sensation. Any area of pain with swelling or inflammation, the condition may worsen.</p>
	<p>The <b>neck</b> or any area of the throat because this could cause severe muscle spasms resulting in closure of the airway, difficulty in breathing, or adverse effects on heart rhythm or blood pressure.</p>		<p>On both legs, such as calves at the same time because this may cause cardiac disturbance.</p>	
	<p>Do not use <b>near the heart</b>, or on genital area.</p>		<p>On the <b>bottom of both feet</b> at the same time because this may cause cardiac disturbance.</p>	

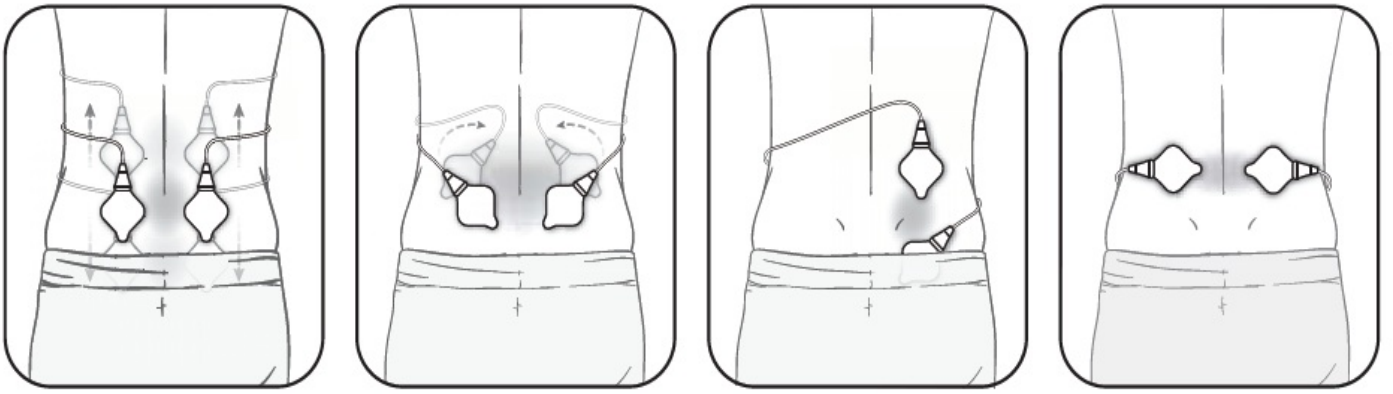
**GET STARTED WITH YOUR THERAPY**

**(USE FOR A MAXIMUM OF ONE 30 MINUTES PER SESSION)**

**STEP 1 - PAD PLACEMENT**

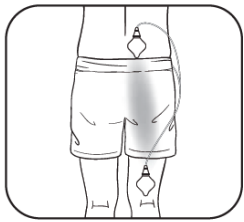
**Clean and dry affected area so it is free of all lotions/oils/sweat.** The PAD with GEL should be applied only to normal, intact, clean, healthy skin that is not experiencing any swelling or inflammation.

Before starting your therapy, rate your pain from 1 low to 10 high. This mental check gives you a basis you can compare to once the session is complete.



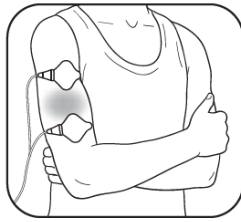
### LOWER BACK

Attach both pads on the lower back according to your pain. **Place pads on muscle of the back, not on spine, for optimal therapy.**



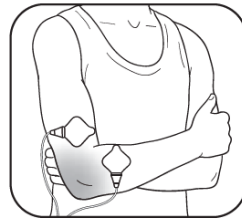
### LOWER BACK

Attach 1 pad below and above the region in pain, both on same side.



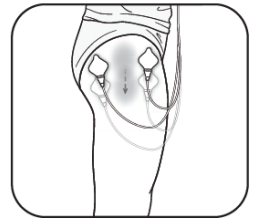
### ARM

Attach both pads on either side of the region where you feel pain.



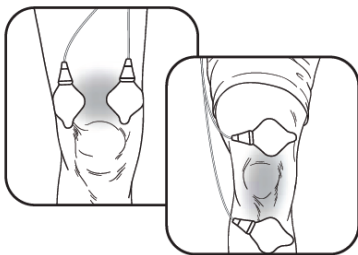
### JOINT (ELBOW)

Attach both pads on either side of the joint with pain.



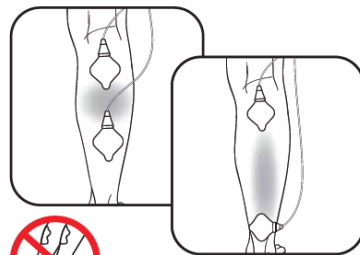
### LEG (HIP & THIGH)

Attach both pads on either side of the area with pain.



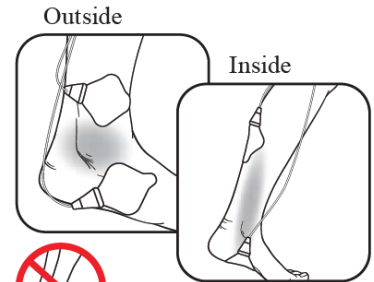
### JOINT (KNEE)

Attach both pads above the knee or above and below the joint with pain.



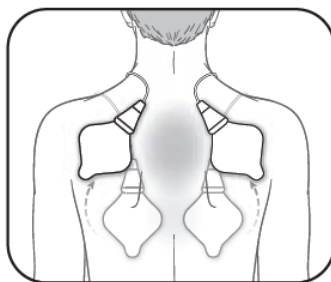
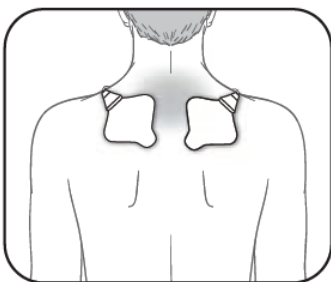
### LEG (CALF)

Attach both pads on the calf where you feel pain.  
**⚠ Pads should not be placed simultaneously on both legs, such as the calves.**



### FOOT (ANKLE)

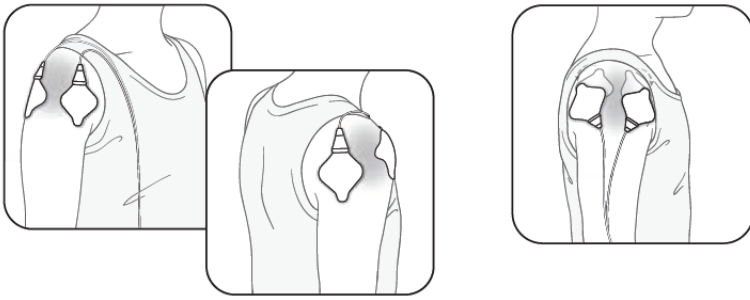
Attach pads on the left for pain on the outside of your ankle/foot. Attach the pads on the right for pain on the inside of your ankle/foot.  
**⚠ Do not put the pads on the bottom of both feet at the same time.**



### SHOULDER

Attach both pads on the shoulder according to your pain.





## SHOULDER

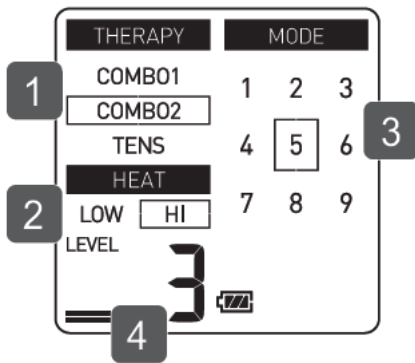
Attach 1 pad on the front and on the back of your shoulder.

**Do not use near the heart, on both sides of the chest cavity or across your chest because the introduction of electrical current may cause rhythm disturbances which could be lethal.**

### STEP 2 - REMEMBER THESE SIMPLE STEPS

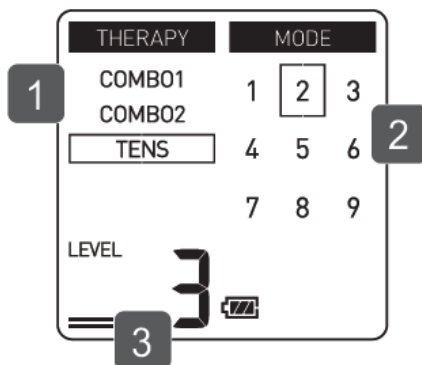
#### COMBO 1 & COMBO 2

1. Pick therapy
2. Pick Heat Setting
3. Pick Mode
4. Adjust Power Level of Intensity (when TENS starts)



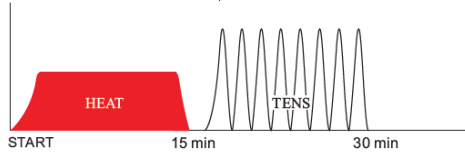
#### TENS Only

1. Pick Therapy
2. Pick Mode
3. Adjust Power Level of Intensity



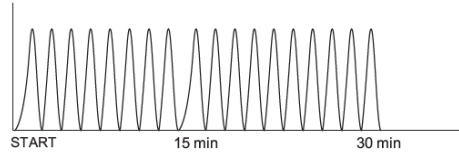
**Note: TO CHANGE THERAPIES, Turn Main Unit OFF, then ON again.**

### COMBO 1 Therapy\*



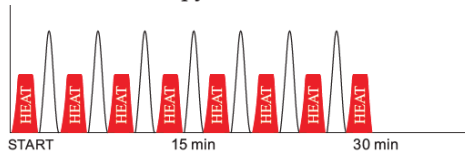
COMBO 1 Therapy delivers 15 minutes of heat followed by 15 minutes of any one of the TENS modes for a total of 30 minutes of therapy.

### TENS Therapy\*



TENS Therapy provides only TENS for 30 minutes.



### COMBO 2 Therapy\*



COMBO 2 Therapy delivers heat and TENS alternately for a total of 30 minutes of therapy.

\* Approximate pattern, not exact.

## STEP 3 - PICK THE THERAPY

Push  (power) button to turn on. Select 1 of 3 therapies using the  (up/down) arrow buttons. Next, push SET/START to lock in therapy.

**COMBO 1** - Heat 15 min, TENS 15 min

**COMBO 2** - Short sessions of HEAT / TENS/ HEAT / TENS alternating for 30 min.

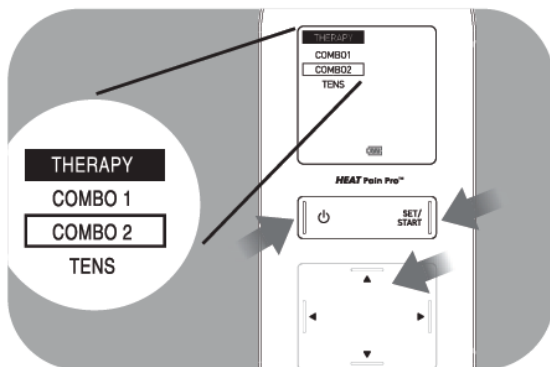
**TENS** - Electrical Stimulation only for 30 min.

**Note:** All therapies automatically stop after 30 minutes.


TO CHANGE THERAPIES,

Turn Main Unit OFF, then ON again.

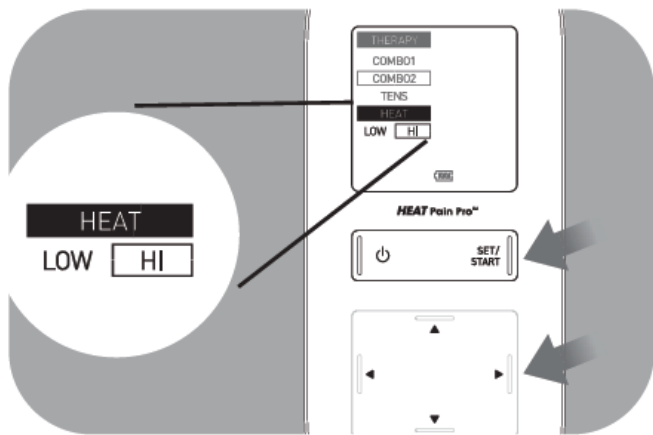
Three Therapies Available



## STEP 4 - PICK HEAT SETTING

Select HEAT HI or LOW using the  (left/right) arrow buttons. Next, push SET/START to lock in heat setting.

**Note:** Heat setting applies only to COMBO 1/COMBO 2 Therapies.



**Note:** Low temperature - 107 °F (42 °C)

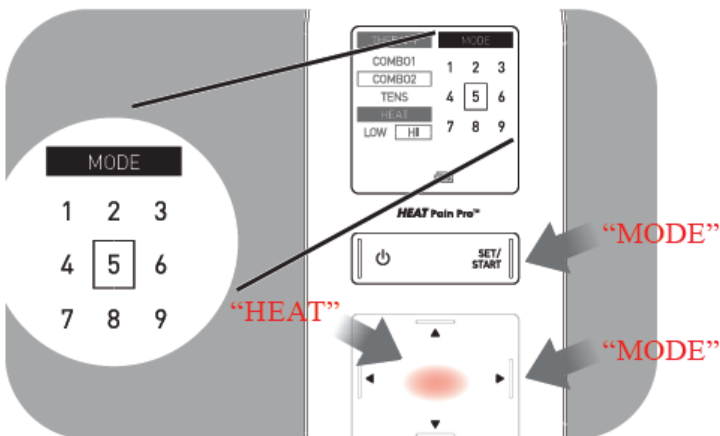
Hi temperature - 110 °F (43 °C)

Actual temperature may vary due to skin condition, age, location of pain and more.

### STEP 5 - PICK 1 OF 9 MODES

Select MODE by pushing the SET/START button. To CHANGE MODES, MODES, use the ▲▼ (up/down) and ◀▶ (left/right) arrow buttons.

**Note:** COMBO 1 & COMBO 2 therapies begin with “HEAT” and you will see a RED GLOW. When TENS is in use the RED GLOW will disappear.



### How to switch modes

**The unit automatically defaults to the last mode selected.** Push SET/START button to switch

modes. Use ▲▼ (up/down) and ▶◀ (left/right) arrow buttons to move from mode to mode. Push SET/START to lock in the mode.

### How to select the right mode

Any of the modes can be used on body parts or pains described in this manual or Quick Start Guide/Pad Placement Guide. Select the mode that feels comfortable for your unique pain.

**Note:** See side of device for easy reference of operation.



Symbol Definition		Mode		
	Power On / Off	<input type="checkbox"/> 1 Tap	<input type="checkbox"/> 2 Knead	<input type="checkbox"/> 3 Rub
<b>SET/</b>	- Set THERAPY / HEAT / MODE	<input type="checkbox"/> 4 Arm	<input type="checkbox"/> 5 Lower Back	<input type="checkbox"/> 6 Leg
<b>START</b>	- Start THERAPY	<input type="checkbox"/> 7 Foot	<input type="checkbox"/> 8 Joint	<input type="checkbox"/> 9 Shoulder
	- Change MODE			

**Mode 1**  MODE

<input type="checkbox"/> 1	2	3
4	5	6
7	8	9

**Mode 2**  MODE

1	<input type="checkbox"/> 2	3
4	5	6
7	8	9

**Mode 3**  MODE

1	2	<input type="checkbox"/> 3
4	5	6
7	8	9

**Mode 4**  MODE

1	2	3
4	5	6
7	8	9

Therapies designed for	Mode 1 - Tap	Mode 2 - Knead	Mode 3 - Rub	Mode 4 - Arm
Potential conditions	Stiffness, soreness, tight feeling.	Stiffness, sore or achy, knotty muscles, tight feeling.	Stiffness, sore or achy, knotty muscles, tight feeling.	Swelling, stiffness, sore or achy, muscle or nerve pain.
What does the therapy deliver?	Series of low rate tapping sensations.	Series of medium rate pulsing sensations to mimic massage.	Series of high rate pulsing sensations to mimic hands rubbing.	Series of low to medium rate tapping, tingling and pulsing sensations.

**Mode 5**  MODE

1	2	3
4	<input type="checkbox"/> 5	6
7	8	9

**Mode 6**  MODE

1	2	3
4	5	<input type="checkbox"/> 6
7	8	9

**Mode 7**  MODE

1	2	3
4	5	6
<input type="checkbox"/> 7	8	9

**Mode 8**  MODE

1	2	3
4	5	6
7	<input type="checkbox"/> 8	9

**Mode 9**  MODE

1	2	3
4	5	6
7	8	<input type="checkbox"/> 9

Therapies designed for	Mode 5 - Lower Back	Mode 6 - Leg	Mode 7 - Foot	Mode 8 - Joint	Mode 9 - Shoulder
Potential conditions	Stiffness, soreness, muscle spasm, nerve pain.	Swelling, fatigue, stiffness, muscle or nerve pain.	Swelling, fatigue, chilly feeling, sore or achy.	Swelling, stiffness, sore or achy.	Stiffness, sore or achy, tight feeling.
What does the therapy deliver?	Series of high rate to low tingling sensations, followed by tapping. With higher intensity, you may feel kneading or massage-like sensations.	Series of low to medium tapping and rubbing sensations.	Series of low rate tapping, pulsing sensations.	Series of medium to high rate tapping, pulsing sensations.	Series of low to high rate tapping, pulsing, kneading and massage-like sensations.

## STEP 6 - ADJUST THE LEVEL OF INTENSITY (1 LOW - 20 HIGH)

**Start at the lowest intensity level and slowly increase it by pushing the ▲ (up) or ► (right) arrow button.** You should feel a gentle pulsing sensation.

When the main unit is in "TENS" stimulation, you can adjust the power level of intensity. **Use any of the arrow buttons to CHANGE THE POWER LEVEL OF INTENSITY.**

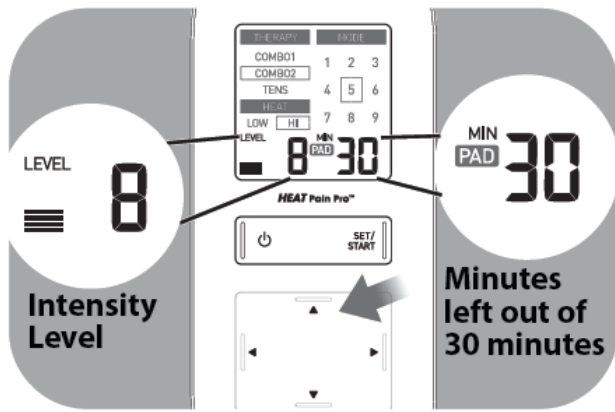
**How do I pick the right intensity level for my pain?**

Each time you press the ▲ (up) or ► (right) or ▼ (down) or ◀ (left) arrow button, it moves to another level. If the stimulation sensation becomes weaker or disappears, increase the intensity until it is restored. But, if the sensation is at all uncomfortable, press the ▼ (down) or ◀ (left) arrow button to decrease the intensity.

- Press the ▲ (up) or ► (right) arrow button for higher intensity.
- Press the ▼ (down) or ◀ (left) arrow button for lower intensity.

**How long is the therapy?**

The unit will operate automatically for 30 minutes before it shuts off. We recommend a maximum of one 30 minute therapy in one sitting, up to 3 times/day. The screen shows you how many minutes are remaining.



## HOW TO CONTROL AND REDUCE YOUR PAIN

### When should I start therapy?

Use as soon as your pain begins. Start with 1 session (the unit automatically turns off at 30 minutes). Turn off with pads still on and RATE YOUR PAIN again (1 low to 10 high).

### Get to your pain early

If you get to your pain early, it may prevent the pain from becoming worse, or even chronic. It's better for you to get it under control sooner so that it does not reach a high pain threshold where it limits your daily activities.

### How long should you use it?

Start with one 30 minute session. Always turn the unit off with pads still on. Rate your pain to check your progress, 1 low to 10 high. Stop therapy session if pain has reduced or stopped.

<b>1 session</b> <b>30 minute</b> <b>automatic shut-off</b>	<b>Max minutes/session</b> <b>30 minutes</b>	<b>Max times/day</b> <b>3 times per day</b>
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See precautions on page 8. Long-time treatment and strong stimulation may cause muscular fatigue and may generate adverse effects.

### When to stop using the unit?

1. If you experienced an **adverse reaction** (skin irritation/redness/burns, headache or other painful sensation, or if you feel any unusual discomfort).
2. If your pain **does not improve**, becomes seriously chronic and severe, or continues **for more than 5 days**.

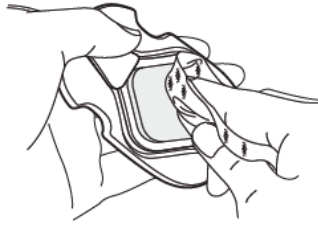
Remember, the unit does not cure your pain or the original cause of the pain. It provides temporary relief or reduction of pain so that you can control your life and activities better.

## CLEANING AND STORAGE

**The Cord with Pads, and the Main Unit are permanent and CAN BE CLEANED, but you cannot clean the Gels.**

### Cleaning the main unit and the cord with permanent pads

1. Remove the Gel and discard before cleaning the Pad.
2. When the Pad or Main Unit have become dirty or soiled, wipe the surface with a soft cloth



moistened with water or a neutral detergent.

- Do not get the Main Unit or cord with pads wet.
  - Do not wash the pads with running water.
3. Let air dry before placing new Gels onto the Pads, do not use old gels.
  4. **Gels are replaceable and can be purchased when needed by calling 1-800-634-4350 or go to [OmronHealthcare.com](http://OmronHealthcare.com).**

#### Cleaning the unit

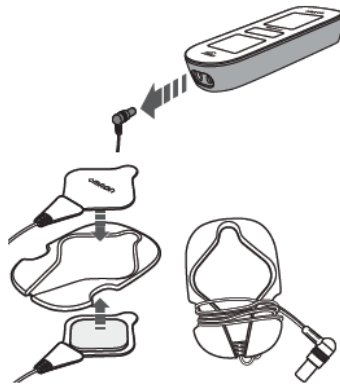
1. Turn the unit off and disconnect the cord with pads from the unit.
2. Clean with a lightly moistened cloth (or a cloth soaked in a neutral cleaning solution) and wipe gently.
  - Do not use chemicals (like thinner, benzene).
  - Do not let water get into the internal area.

#### When should you replace your gels?

If the gel no longer sticks firmly to your skin, or if more that 25% of the gel is not in contact with your skin, replace the Gel.

#### Storing the pads with gels

1. Turn the unit off and remove the cord from the bottom of the unit.



2. Remove the pads from your body.
3. Leave the cord connected to the pads.  
Place the pads on the pad holder, 1 pad on each side with the sticky side of each pad on the pad holder.
4. Wrap the pads with gels cord around the pad holder.

#### Storing the main unit and the pads with gels

- Do not keep in areas subject to direct sunlight, high or low temperatures, humid area, near to fire, vibration, or shock.
- Try not to bend or fold the cord with pads and gels during therapy or during storage.



### Storage temperature

+32 to +104 °F (0 to +40 °C) 30 to 80 % relative humidity.

- **Do not keep at places that can be easily reached by children.**
- Do not wrap the cord around the unit because it may damage the cord.




### For information about how to dispose of the used battery and unit

- Consult the guidelines of your city, county or state.

## TROUBLESHOOTING

<b>If this happens...</b>	<b>Possible causes...</b>	<b>Try this solution...</b>
<b>The intensity is not felt. Very weak intensity level.</b>	Are you using only 1 pad?	Place the other pad on your skin. You must use BOTH PADS for therapy to work.
	Have you removed the transparent film from the gels?	Peel off the film on the adhesive surface of gels.
	Are the pads stacked together or do pads overlap?	Check placement of pads. Refer to “Pad Placement Guide”.
	Is the cord properly connected to the unit?	Connect the cord plug correctly into the jack at the bottom of the unit.
	Is the intensity setting too low?	Press the ▲ (up) arrow button.
	Is the gel damaged?	Replace the Gel.

<b>If this happens...</b>	<b>Possible causes...</b>	<b>Try this solution...</b>
<b>The intensity is not felt. Very weak intensity level.</b>	Does the battery have enough charge?	Charge the battery fully.
<b>The skin turns red or feels irritated.</b>	Is the Gel dirty?	Replace the Gel.
	Is therapy time too long?	Shorten therapy to less than 30 minutes.
	Are the 2 pads attached properly to the body?	Refer to the “Pad Placement Guide” and attach correctly.
	Is the gel surface worn out?	Replace both gels at the same time.
<b>No power source.</b>	Are the batteries depleted?	Recharge the battery fully.

<b>If this happens...</b>	<b>Possible causes...</b>	<b>Try this solution...</b>
<b>No power source.</b>	Is the battery properly charge?	Check if the AC adapter is properly connected to the unit. Check if AC adapter is connected to a power outlet.
<b>Power cut off during use.</b>	Is the battery charge extremely low?	Recharge the battery fully.
	Is the cord broken?	Replace the cord.
	Are you using only 1 pad?	Put the other pad on your skin. You must use BOTH PADS for therapy to work.
<b>Battery icon is depleted or close to empty.</b> 	Is the battery fully charged?	Recharge the battery fully.

<b>If this happens...</b>	<b>Possible causes...</b>	<b>Try this solution...</b>
<b>The gel does not stick to skin.</b>	Have you removed the transparent film from the gels?	Peel off the film on the adhesive surface of gels.
	Is the pad wet? or Is your skin too wet?	Air dry the gel or skin.
	The gel may be damaged.	Replace the gel.
	Is there too much hair on your skin?	Shave the immediate area for proper pad adhesion.
<b>The pad gel does not stick to skin.</b>	Is your skin too wet?	Dry the skin area.
	Were the gels stored under high temperature, high humidity, or direct sunshine?	Replace both gels.

<b>If this happens...</b>	<b>Possible causes...</b>	<b>Try this solution...</b>
<b>The main unit or the AC adapter is abnormally hot when charging the battery.</b>	The main unit or the AC adapter may be damaged.	Unplug the AC adapter from the outlet and the cord plug from the main unit immediately.
<b>PAD</b> is displayed.	Only 1 pad is attached, or both pads are not attached.	Re-attach dislocated pad(s) onto the skin firmly.
	Have you removed the transparent film from the gel?	Peel off the film on the adhesive surface of gels.
	Is the cord properly connected to the main unit?	Connect the cord plug correctly into the jack at the bottom of the main unit.
	Is the adhesive surface of gels dirty or dry?	Replace the Gels.

<b>If this happens...</b>	<b>Possible causes...</b>	<b>Try this solution...</b>
<b>The pads are not getting hot. The RED GLOW does not come on.</b>	Is the cord properly connected to the unit?	Check if the cord is properly connected.
	Is the cord disconnected or short-circuited?	Replace the cord.
<b>The Pads with Gels are too hot on the skin and there is a burning scent.</b>	Is the cord short-circuited?	Stop using the unit immediately, and replace the cord.
	Is the Pad with Gel broken or bent?	Stop using the unit immediately, and replace the entire Cord with Pads and/or Gels.
	Have you changed the heat setting too frequently during the therapy?	Stop using the unit immediately, and do not change the heat setting many times during the session.

<b>If this happens...</b>	<b>Possible causes...</b>	<b>Try this solution...</b>
<b>E 1</b> E1 is displayed.	Is the cord properly connected to the unit?	Check if the cord is properly connected. If the error is still displayed, the cord may be broken (damaged). Replace the cord.
<b>E 2</b> E2 is displayed.	Is the cord internally short-circuited?	Stop using the unit immediately, and replace the cord.
<b>E 3</b> E3 is displayed.	Are there any abnormalities in the main unit of the device?	The main unit may be damaged. Stop using the unit immediately, and contact OMRON Customer Service Center.

<b>If this happens...</b>	<b>Possible causes...</b>	<b>Try this solution...</b>
<b>E 4</b> E4 is displayed.	The unit is being used outside of the operating temperature.	Leave the unit within the operating temperature (+50 to +104 °F (+10 to +40 °C)) for a while before use.
<b>The operating time is short, or the unit does not operate, even when the battery is fully charged.</b>	This may be due to the life of the rechargeable battery. However, the battery cannot be replaced. Please dispose of the unit.	

If the above measures are not effective, contact us at 1-800-634-4350.

## **SPECIFICATIONS/SYMBOLS**

Product Name	OMRON® HEAT Pain Pro™
Model #	PM311 <span style="border: 1px solid black; padding: 0 2px;">REF</span> HV-F311-Z
Power Source	AC adapter (INPUT AC120 V, 60 Hz) 1 Lithium-ion battery (3.7 V; Approx. 1510 mAh)
Rechargeable Battery	Will last for 500 uses when fully charged and under the following conditions: new battery was fully charged, used 1 time/day in normal temperatures of 73.4 °F (23 °C)
Frequency	Approx. 0.7 to 108 Hz
PULSE Duration	100 µsec
Maximum Output Voltage	70 V (during 500 Ω load)
Power Control	20 intensity levels

### **Notes:**

- These specifications are subject to change without notice.
- Designed for a minimum of 5 years life expectancy except Gels.

### **Accessories/replacement parts**

- PMGEL
- HV-PAD
- AC Adapter (HHP-AM11)

**To order : OmronHealthcare.com**



## Notes:

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- PMGEL
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- AC Adapter (HHP-AM11)

To order : [OmronHealthcare.com](http://OmronHealthcare.com)

## Symbols:



= This shows the Type BF applied part.



= This shows the Class II equipment.



= Consult instructions for use.



This product should not be used by persons with medical implants, e.g. heart pacemakers, artificial heart, lung or other electronic life support systems.

## IP22

IP classification is degrees of protection provided by enclosures in accordance with IEC 60529. This device is protected against solid foreign objects of diameter 12 mm such as a finger and greater, and against oblique falling water drops which gives trouble to normal operation.

## FCC STATEMENT

### FCC CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is

connected.

- Consult the dealer or an experienced radio/TV technician for help.

## **IMPORTANT INFORMATION REGARDING ELECTRO MAGNETIC COMPATIBILITY (EMC)**

With the increased number of electronic devices such as PC's and mobile (cellular) telephones, medical devices in use may be susceptible to electromagnetic interference from other devices. Electromagnetic interference may result in incorrect operation of the medical device and create a potentially unsafe situation.

Medical devices should also not interfere with other devices.

In order to regulate the requirements for EMC (Electro Magnetic Compatibility) with the aim to prevent unsafe product situations, the IEC60601-1-2 standard has been implemented. This standard defines the levels of immunity to electromagnetic emissions for medical devices.

Medical devices manufactured for OMRON Healthcare conform to this IEC60601-1-2:2007 standard for both immunity and emissions.

Nevertheless, special precautions need to be observed:

- The use of accessories and cables other than those specified by OMRON, with the exception of cables sold by OMRON as replacement parts for internal components, may result in increased emission or decreased immunity of the device.
- The medical devices should not be used adjacent to or stacked with other equipment. In case adjacent or stacked use is necessary, the medical device should be observed to verify normal operation in the configuration in which it will be used.
- Do not use mobile (cellular) telephones and other devices, which generate strong electrical or electromagnetic fields, near the medical device. This may result in incorrect operation of the unit and create a potentially unsafe situation. Recommendation is to keep a minimum distance of 7 m. Verify correct operation of the device in case the distance is shorter. During the immunity tests described below the device operated normally.



The PM311 is intended for use in the electromagnetic environment specified below. The customer or the user of the PM311 should assure that it is used in such environment.

<b>Electromagnetic emissions IEC60601-1-2</b>		
<b>Emissions test</b>	<b>Compliance</b>	<b>Electromagnetic environment - guidance</b>
RF emissions CISPR 11	Group 1	The PM311 is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes
RF emissions CISPR 11	Class B	
Harmonic emissions IEC 61000-3-2	not applicable	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	not applicable	

Electromagnetic immunity IEC60601-1-2			
Immunity test	IEC 60601 Test level	Compliance level	Electromagnetic environment –guidance
Electrostatic discharge, ESD (IEC 61000-4-2)	Contact discharge: $\pm 6$ kV Air discharge: $\pm 8$ kV	Contact discharge: $\pm 8$ kV Air discharge: $\pm 15$ kV	The relative humidity should be at least 5 %.
Electrical fast transients / bursts (IEC 61000-4-4)	Power supply lines: $\pm 2$ kV Longer input / output lines: $\pm 1$ kV	Power supply lines: $\pm 2$ kV Longer input / output lines: N/A	Mains power quality should be that of a typical home, commercial or hospital environment.
Surges on AC mains lines (IEC 61000-4-5)	Common mode: $\pm 2$ kV Differential mode: $\pm 1$ kV	Common mode: $\pm 2$ kV Differential mode: N/A	Mains power quality should be that of a typical home, commercial or hospital environment.

Electromagnetic immunity IEC60601-1-2			
Immunity test	IEC 60601 Test level	Compliance level	Electromagnetic environment –guidance
Voltage dips, short interruptions and voltage variations on power supply IEC 61000-4-11	$< 5\% U_T$ ( $> 95\%$ dip in $U_T$ ) for 0.5 cycle $40\% U_T$ ( $60\%$ dip in $U_T$ ) for 5 cycles $70\% U_T$ ( $30\%$ dip in $U_T$ ) for 25 cycles $< 5\% U_T$ ( $> 95\%$ dip in $U_T$ ) for 5 s	$< 5\% U_T$ ( $> 95\%$ dip in $U_T$ ) for 0.5 cycle $40\% U_T$ ( $60\%$ dip in $U_T$ ) for 5 cycles $70\% U_T$ ( $30\%$ dip in $U_T$ ) for 25 cycles $< 5\% U_T$ ( $> 95\%$ dip in $U_T$ ) for 5 s	Mains power quality should be that of a typical home, commercial or hospital environment. If user requires continued operation during power mains interruption insure that batteries are installed and charged. Insure that battery life exceeds longest anticipated power outages or provide an additional uninterruptible power source.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	30 A/m	Magnetic fields from common appliances are not expected to affect the device.
<b>Note:</b> $U_T$ is the A.C. mains voltage prior to application of the test level.			

Electromagnetic immunity IEC60601-1-2			
Immunity test	IEC 60601 Test level	Compliance level	Electromagnetic environment –guidance
Conducted RF IEC 61000-4-6	3 V rms 150 kHz to 80 MHz	6 V rms	Portable and mobile RF communications equipment should be used no closer to any part of the PM311 including cables, than the recommended separation distance calculated from the equation appropriate to the frequency of the transmitter. Recommend separation distance $d = 0.58 \sqrt{P}$ 150 kHz to 80 MHz
Radiated RF IEC 61000-4-3	3 V/m	10 V/m	$d = 0.35 \sqrt{P}$ 80 MHz to 800 MHz $d = 0.7 \sqrt{P}$ 800 MHz to 2.5 GHz

Electromagnetic immunity IEC60601-1-2			
Immunity test	IEC 60601 Test level	Compliance level	Electromagnetic environment –guidance
			where $P$ is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and $d$ is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters as determined by an electromagnetic site survey, <sup>*2)</sup> should be less than the compliance level in each frequency range. <sup>*3)</sup> Interference may occur in the vicinity of  equipment marked with the following symbol: 
<p>Note1: At 80 MHz and 800 MHz, the higher frequency range applies.</p> <p>Note2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.</p>			
<p>*2) Field strengths from fixed transmitters, such as base stations for radio (cellular/ cordless) telephones and land mobile radio, AM and FM radio broadcast, and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the PM311 is used exceeds the applicable RF compliance level above, the PM311 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the PM311.</p> <p>*3) Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 6 V/m.</p>			

<b>Recommended separation distance between portable and mobile RF communications equipment and the PM311</b>			
The PM311 is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customers or the users of the PM311 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the PM311 as recommended below, according to the maximum output power of the communications equipment.			
Output Power of Transmitter in Watt	Separation distance according to frequency of transmitter in meter		
	150 kHz to 80 MHz $d = 0.58 \sqrt{P}$	80 kHz to 800 MHz $d = 0.35 \sqrt{P}$	800 MHz to 2.5GHz $d = 0.7 \sqrt{P}$
0.01	0.06	0.04	0.07
0.1	0.18	0.11	0.22
1	0.58	0.35	0.7
10	1.8	1.1	2.2
100	5.8	3.5	7.0

For transmitters rated at a maximum output power not listed above, the recommended separation distance  $d$  in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where  $P$  is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

**Note:** At 80MHz and 800MHz, the separation distance for the higher frequency range applies

**Note:** These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

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